

ABSTRACT

Sub
A27

OPTICAL DEVICE FOR HELMET VIEWFINDER
COMPRISING A DIFFRACTIVE MIRROR

The invention relates to an optical device for a system for presenting images collimated by an off-axis spherical concave mirror (1).

The invention makes it possible to present to the user (3) an image corrected of the off-centering distortion due to the off-axis spherical concave mirror (1) without degrading the image quality.

To do this, the device according to the invention comprises a diffractive mirror (21) placed in the vicinity of an intermediate image (25, 27) of the device, preferably the second intermediate image (27).

The extent of the vicinity is limited by the resolution of the image and, in the vicinity, the correction by the diffractive mirror (21) does not degrade the resolution.

The diffractive mirror presents a hologram which may be numerical or made in a photosensitive material.

The substrate of the hologram is preferably not plane so as to take on board some of the correction, the residual correction being performed by the hologram.

The invention applies in particular to helmet viewfinders for aircraft pilots.

FIGURE 3.

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